

GEORGE W. YORK,

DEVOTED EXCLUSIVELY—TO BEE-CULTURE

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To Wisconsin Bee-Keepers.

-We have received the following from Mr. Franklin Wilcox, of Mauston, Wis., which will interest every honey-producer in that State:

MAUSTON, Wis., Feb. 13, 1893. If the Wisconsin bee-keepers desire an exhibit of honey from this State, they must speak very soon. As I understand it, they must decide what they will exhibit, and report to me before March 1st, if they wish to get their names in the Directory as exhibitors. I have been asked to collect, prepare and arrange the State exhibit. I think it very doubtful if individuals can get space to exhibit independent of the State exhibit.

I want all who have any choice honey or beeswax, to report to me at once, just what they have. All expense of collecting, transporting and arranging exhibits will be paid out of the State appropriation. Exhibitors furnish the honey and wax.

Franklin Wilcox.

There is indeed no time for delay in this matter. Let there be a prompt response to Mr. Wilcox's appeal, so that he may be able to make a creditable display for Wisconsin bee-keepers.

"Bees and Honey"—see page 229.

Final Statements, even on the sugar-honey subject, must come sometime, and we think it is best to let them cease with this number, so far as the American Bee Journal is concerned, unless absolutely necessary to refer to the matter again. Here is Dr. Miller's reply to our editorial of last week:

I will not ask the space to reply in full to your editorial in last number, but will make some effort to be brief, replying only to part of what seems to call for reply. Allow me first of all to acknowledge with pleasure the good-natured spirit your have shown toward myself personally, even in your hardest thrusts. There is something always to admire in an open foe, and when good-nature is joined to that openness, it's hard to draw the line between foe and friend. Now I'm going to spoil that compliment by saying, if in this case you were only as reasonable as good-natured—but then we're none of us perfect.

You say: "If bee-keepers can con-scientiously feed sugar to bees to be stored in combs, and then sell it for honey, may they not almost as consistently mix glucose with extracted honey, and sell it for pure honey? It differs mainly in appearance—the results are about the same." Friend York, please put that paragraph in some safe place, and in the year 1903 (that will be ten years from now, and I hope you'll be editor of American Bee Journal long after that)-in 1903 read it over, and see if you don't feel inclined to think it was written during a fit of temporary aberration. In the first place, mixing and feeding are two very different things. The books tell us that the canesugar of nectar fed to the bees becomes honey, but we know that cane sugar mixed with honey does not become honey. In the second place, sugar and glucose are not the same, so that even if it could be proven right to mix sugar with honey, that doesn't prove that it would be right to thus mix glucose.

You say: "It differs mainly in appearance." Does it? If there were placed before me two bottles, one containing pure honey and the other glucose and honey, half and half, I'm sure I could not be certain from the "appearance" which was pure, and I don't be-lieve you could. But I think I could tell a decided difference in the taste, if one bottle contained a mixture of glucose and honey, and the other a mixture of cane sugar and honey, even if the bees had nothing to do with the latter. Indeed to prove that there is a difference. it is only necessary to quote the words of your editorial, "Good testimonies say that bees don't like glucose in their honey any more than do people. we know that bees do like sugar. So that sentence, "It differs mainly in appearance—the results are about the same," is entirely correct if we make some slight verbal changes, so as to make it read, "It differs not at all in appearance-the results are widely different."#

You ask, "Because they honestly believed that bees make honey out of sugar, does that make it so?" I'll give you a categorical answer—No. But it makes a world of difference as to their criminality in the case whether they

honestly believed it or not.

Now let's see if we can't get down to bed-rock. I am sorry that you did not say in just so many words what was the direct charge, but I think it may be prettly clearly inferred from your saying, "The question is not whether bees make honey or not, but whether the publishing of the suggestion of feeding sugar to bees for the production of honey will not result in untold danger to floral honey production." Not stopping to consider a certain inconsistency that may be lurking in those words, and putting the matter in just as few words as possible, confining it to a single case, I think you and I would agree that the charge is this: Prof. Cook gave it out as his opinion that it would be a good thing to feed bees sugar for them to store as surplus.

Now if that's the charge, then we have something definite to talk about, and if it isn't the correct charge, then you say what is the charge, for I am not trying to make the charge, only for the sake of saving time trying to put it into

specific form. You say, "It is another mistake for any one to say that we expect them to state anything contrary to their honest convictions." Good. Now you're talking reasonably, and we may yet see eye to eye. The accused thought it would be a good thing to feed sugar for surplus. That was his honest conviction, and you don't expect him to state anything contrary to it. Furthermore he gave out or published that opinion. But it was his honest conviction that it would be for the good of beekeepers to publish what he believed to be the truth, and you don't want him to state anything contrary to that honest conviction.

Now there's the whole thing in a nutshell. He honestly said what he honestly believed, and he cannot honestly say he is sorry he believed what he thought was truth, nor that he is sorry he said what he honestly believed would

do good.

But you intimate that he might make "a manly expression of regret that a stupendous mistake had been made." Yes, he might do that. But you would not publish it if he did. For it would be something like this, "I regret exceedingly, more than I can well express in words, that my friends York and Miller are so blinded by prejudice that"—but about that time you'd stop him, and tell him that you wanted him to regret what he had himself said. But he'd tell you that he could hardly regret having said the truth, and then he'd commence to try to convince you that he was correct in his belief, but you would tell him you didn't want that discussed. But he would tell you that you are allowing it to be discussed, and would point you to page 179, and ask you whether J. F. Latham's article did not discuss it, as also the article of Dr. McKinney, on page 181, where, under the pretense of not discussing it, he asks "permission to make a few plain statements." Would it not be entirely in order for Prof. Cook to "make a few plain statements" in reply? No, you don't want him to, and I don't want him to; neither do I want to see the other side discussed with no chance for reply.

In regard to that \$50 and \$100 which is labeled "A Challenge," I think if you will go out to—where is it, Hawthorne, or Garfield Park?—the sports will tell you that's a plain bet, and I don't think you'll find Prof. Cook a "taker." I

don't think he ever gambles.

It would be entirely like Prof. Cook to think, "Well, if I had known how it would be received, I doubt if I would have wasted my breath or ink, and I wish the thing had never come up;"and you and I can heartily second the wish, but you'll not get any such expression out of him by pounding him. I'm sure you wouldn't out of me. "No, not upon compulsion, not if regrets were as thick as blackberries," to paraphrase the words of Falstaff. No, I'd see you—I was going to say I'd see you hanged first; but I don't know that I would, for with all your "mulishness" I think lots of you, and would do almost anything to save your neck from the halter.

Heigh-ho! this is brevity with a vengeance, isn't it? But really and truly I did mean to be brief, and I've left untouched several spots where I thought I could get in a good "lick" at you. But I think I'll agree not to take up any more space on the subject, and will leave you the closing argument, unless indeed I've been arguing on the wrong

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If regrets will do any good, I regret with all my heart that the subject ever came up at all, and although it might not be best to say so publicly, I'll just whisper in your private ear that I believe the quicker you and I "shut up" the better.

C. C. MILLER.

*A word in explanation of the sentence—"It differs mainly in appearance—the results are about the same." Dr. Miller did not get our intended meaning, which was this: We did not have reference to the looks or "appearance" of the "honey" and mixture, but had in mind the two acts—one of transferring sugar into combs by bees, and the other of mixing glucose with extracted honey. Also, what we meant by saying "the results are about the same," was that customers would so consider it.

As said in our introduction to the above reply by Dr. Miller, we think this matter has been ventilated quite enough for the present. We have endeavored to do and say in reference to it just what we sincerely thought was our duty to all concerned. We may have been pretty severe in our condemnation, but we felt the case demanded it, and we think that the great majority of our readers will approve our course. No one could possibly regret more than ourselves the seeming necessity for the use

of strong language in treating the subject of sugar-honey production. What we have "writ," we have "writ," however, and are now quite willing to leave to the future the final decision upon the question.

We are also pleased to let Dr. Miller have the "last word," rather than to reply again as we should like to do, but which would tend to continue the unprofitable questioning and commenting. No one can mistake the position of the American Bee Journal upon this or any other subject, and so long as we may be permitted to control this publication we propose to stick to our clearcut motto—"Do right and fear no one"—doing our duty and the right as God may give us to see that duty and that right.

Mr. John H. Martin, Gleanings' notorious "Rambler"—Secretary of the California State Bee-Keepers' Association, has sent us an interesting report of the meeting of that association held in Los Angeles on Feb. 7th and 8th. The attendance was large, and they had "a very profitable season." We will publish the report later.

Bees Not Taxable in Iowa.

—Mr. O. L. Packard, of Sac City, Iowa, wrote us as follows recently, desiring to know whether or not bees are taxable in the State of Iowa:

I want to ask if bees are taxable property in Iowa. The supervisors of this county for the last three years have them assessed at \$2.00 (per colony) for all over 6 colonies. Several of us have refused to pay the tax, and the question has been referred to the Attorney General by our County Auditor, and by the member of the State Legislature from this District, and to neither one has he given an answer as yet.

This year they have agreed to assess them \$1.00 per colony, and we don't want to pay even that, as chickens, turkeys, etc., are not assessed, and there are thousands of dollars worth of them shipped out of the county every year, and I guess never a pound of honey. Will you please refer this ques-

tion to Mr. Eugene Secor, for reply in the American Bee Journal?

If bees are assessable, how are they classed? There is nothing assessed in the State over six months old, and there is no certainty that we have even one bee in the hive over that age.

O. L. PACKARD.

As requested, Hon. Eugene Secor, of Forest City, Iowa, replies thus:

I answered quite fully on page 666 of the BEE JOURNAL for 1889, a question very similar to the one propounded by Mr. Packard. I think it would fully satisfy him that bees are not taxable in Iowa. It seems strange to me that assessors and other officers having in charge the listing of property for taxation and collection of the county revenues, should fail to understand the meaning of a statute so plain in its provisions.

Section 797 of chapter one, Title VI, of the Code gives a list of exemptions for the guidance of assessors. After enumerating various classes of property to be omitted from the assessment rolls, it says in paragraph 4 of said section, "Animals not hereafter specified."

Section 801 specifies the animals to be listed—"horses, cattle, mules, asses, sheep, swine."

Perhaps it is the words "all other property" in the same section which puzzles them. But they should not, because bees are "animals." See definition in Webster's latest unabridged dictionary. Geese, turkeys, ducks, chickens and pigeons are not taxed. Why? Because they are exempt by the same statute quoted first above—"Animals not hereafter specified."

Under that statute, a man may invest \$1,000 in poultry, and it would not be taxable. A good many people are doing it, too.

I am not saying that such exemptions are wise, but there can be no question, it seems to me, that the letter of the law is, and the intention of its framers was, to exempt all these smaller animals.

The merchantable products of the poultry yards of this State are a thousand-fold more than the apicultural, but I have never known an assessor who insisted on listing my chickens, either as "animals" or "other taxable property."

If the assessor insists on listing bees,

If the assessor insists on listing bees, you can safely say to him that you have only one bee in each hive "over six months old" on the first of January. I do not pay taxes on my bees, and do

not purpose to, until the law compels me.

I would not object to such a law, but when bees are taxed, poultry should be. EUGENE SECOR.

Local Checks.—Please do not send us checks on local banks. We have to pay from 15 to 25 cents each to get them cashed here, which is quite a useless expense, when you can either send money by registered letter, or get an express or post-office Money Order. We prefer the express Money Order, if you can get that; otherwise the post-office Money Order or registered letter.



CHAS. F. MUTH.

Bro. Root, in *Gleanings* for June, 1883, wrote as follows concerning our friend Muth:

Charles F. Muth is one of our veterans in bee-culture. Years ago, when we first began to talk about movableframe hives and Italian bees, he was one among us, and a man always posted. Of late years he has been pretty well known by his articles on the treatment of foul brood; and as he succeeds in curing it in his own apiary, we think it fair to presume he would in any apiary, if he had proper facilities. Although for many years friend Muth's apiary was on the roof of his store, or, rather store and dwelling, it is now situated in a sort of open veranda, the open side being next to the river. Through this open side the bees go out and in. The hives are placed a convenient distance from the floor, and arranged with alleys between them.

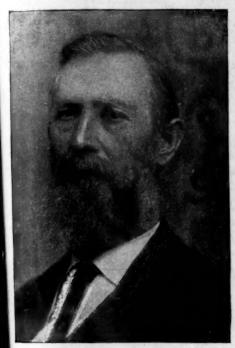
Although he has some 30 or 40 colonies grouped together quite closely, they seem to go out and in, and find their respective hives just as well, for aught we could see, as those located in

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the open air. The bees we saw there in 1882 were beautifully marked, and very docile.

He has, of late years, been more widely known as a great honey buyer, than as a producer of honey on a large scale. Perhaps no man in the world has bought and sold more honey than he has; and one very pleasant thing about it is, that in all these large business transactions, all his customers seem to be warm personal friends.

While at the convention last fall, the subject of the palmetto honey of the



CHAS. F. MUTH.

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South came up. Friend Muth was called upon to tell what he knew about it. In order to impress upon us that the honey was of excellent quality he made the remark that on one shipment which he had engaged for 8 cents a pound, he afterward paid the man 10, because it went so much beyond his expectations. At this point Prof. Cook arose and interrupted him.

"Friend Muth," said he, "I wish to ask just one question right here."

"Very well, go on," said our jovial friend.

"I want to know," said friend Cook,

"if the convention are to understand that this is the kind of a man you are."

"It is the kind of a man I was that time," was the prompt reply. And we really believe that that is the kind of a man friend M. has always been, and we trust always will be.

We may say further that Messrs. Chas. F. Muth & Son have been for 33 years in the honey trade, and in the hundreds of thousands of pounds of honey they have handled, not a single instance can be produced where an ounce of adulteration was found. Their goods have always been labeled pure, and are sold under a positive guarantee, or no sale. The foundation of this now widely known business dates back to 1860, when it was begun in a modest way by Mr. Chas. F. Muth, who, ever since, has contined to direct its annually widening interests.

In 1886, his son, Mr. Aug. J., was taken into partnership, and under this style of firm name it has since been conducted.

The succeeding paragraphs were recently published in a paper in Cincinnati, the home of Messrs. Muth & Son, and show what this firm has accomplished:

As honey merchants, the firm is celebrated throughout the length and breadth of the country, and ship their product into every State, and draw for their supplies on nearly all the States and Territories in the Union. While a large portion of their trade is naturally with wholesale grocers, confectioners, tobacconists, other manufacturers and caterers, they also do a large business in the sale of beeswax to manufacturing establishments, the hardware trade and others. Tons of beeswax they manufacture in comb foundation annually.

No man engaged in apiculture is better posted than Mr. Chas. F. Muth. He has made honey and its production a life-long study. His Indiana farm, utilized for bee-culture and for stock-raising purposes, comprises an area of nearly 600 acres, occupies one-third of his time, and is in a perfect state of cultivation. It is located in close proximity to Indianapolis, and is said to be a model of progressive ideas, with regard to these branches of agriculture.

This, however, is far from being the sole source of supply. The firm buy

direct all available honey stocks in all sections of the country, besides making large importations from Cuba, whenever stocks in America seem insufficient. Buyers have long since learned that they can place implicit confidence in all goods bearing the firm's trade mark.

The trade in pure honey is becoming larger every year. Its wholesomeness and nutritious qualities commend it instead of syrups and other adulterated products. Consumers find the proof verified. The more honey in a family the less medicine. Messrs. Muth & Son fill car-load orders of honey very often.

Such a far-reaching and growing demand has been fully earned and deserved. When this firm entered the trade, over 30 years ago, there was neither system nor profit in apiculture. They have been actively identified with putting a system to honey-production and bringing the business up to a recognized commercial standing, and they are now reaping the reward of hard, practical study and enterprise.



CONDUCTED BY

Mrs. Jennie Atchley, GREENVILLE, TEXAS.

Our School in Bee-Keeping.

Now let all pay close attention. I am going to show you how to divide your bees, or swarm them, as some call it; then further on we will learn how to Italianize and to extract, and, in fact, we will go through all that we can think of; but let us take each subject by itself, and we will learn faster.

I know you want increase, but we will not go into extremes on any line, but I will run your bees for a moderate increase, and to get some honey, too, as I think you will be better pleased, as some go wild on increasing their bees, and go too far, and fail, and get no honey. We usually find such in the "blasted hopes" column sooner or later. I do not wish a single one of my class to fail, so I am

going to carry you over on the safest bridge I know of. Now, attention all, while we divide the bees.

SECOND LESSON-DIVIDING COLONIES.

I will only give you my best way to divide, and where we do not wish to divide but once. We will suppose that the bees are gathering at least honey enough for daily supply, and that the hive is chock-full of bees. Now bring on the new hive, with its frames filled with foundation, lift out the combs until you find the queen, then hang the frame of bees with the queen on it in the new hive, and one more with it; shake enough of the bees off of the other combs in front, or into the new hive to make a rousing colony, then fill it up with frames of foundation, and place it on the old stand, carry the old hive off to a new location, and put in the places where you took out the two frames of bees for the swarm, frames filled with foundation, though the bees will not use them until they recruit, but they will be there ready.

Some make colonies this way, except they do not shake any bees into the new hive, and let all the old field workers make up the colony by returning, when they leave the old hive and return to the new one. This is wrong, and the reason I shake what bees I wish with it at once is to get both young and old bees the same as a natural swarm, and for me they work off as nicely as any natural swarm I ever had. But when you only let the old bees form the colony, you deprive the hive of its active inside workers, and throw it out of natural chan-nels, and then if a honey-flow sets in, the old bees disappear too quickly, or before a new crop of bees comes in, and the hive is at a stand-still, or on a downhill course until the young workers get ready for the field. But this state of things is remedied by shaking, as stated, and the new colony will at once assume a natural course, and work just as well as any swarm; while the old colony will not work at all for three or four days, or at least not much, and should be looked after about stores, until it has a working force.

Now the old colony will start queencells, and after they have all their brood capped, open the hive and take out all the queen-cells but one of the nicest ones, and then you have no after-swarming, and the reason that I want you to wait until the brood is all sealed is, then the bees have no chance to start more cells and swarm in spite of you, and then this would cause an inferior queen in the hive, should it swarm, as the larva would be too old that they made the quen from.

Should the cell you leave them fail, from any cause, to hatch, then swap one frame with the new colony, and give a frame of brood and eggs, that they may have a chance to rear another queen. Or should the queen get lost on her bridal trip, or fail to lay from any cause, take her out and give the bees a chance to rear a good one; or if you do not wish to wait, send to a queen-breeder and get one. In short, if you are going to make a bee-keeper, you will not let the colony perish.

PREPARING FOR THE HONEY-FLOW.

Now as we have our bees divided and working nicely, we will begin to prepare them for the honey-flow. If the harvest comes on soon after the division, the new colony will need sections first, as we will produce comb honey first, then try extracted.

When the bees seem to be gathering more honey than they need for brood-rearing, or when we see the tops of combs with white specks on the them, this is a sign that they are beginning to gather a surplus. Now bring the sections, filled with the thinnest foundation you can get (and when I say "filled," I mean to have it fastened at the top of the section, and lack one-fourth of an inch of touching it any where else). The reason I want them filled is from a common-sense standpoint, that if a slice of a watermelon is good, a whole melon is "gooder." Why? Just because there is more it. I have found that it paid me to fill the section with foundation.

At first we will only put on one tier of sections, and when the bees get well started on them, we will, if honey still comes in, and the general prospects warrant it, put on another crate, by lifting up the first crate, and placing a new one under it. I usually leave a partly-filled section in the lower crate, swapped with one out of the second crate; this serves for a bait, or for a string of bees clear from the top of the brood-nest to the upper crate, as the bees will at once cluster where the honey is; but this is not so very important, as they soon go to work and fill up the empty space as soon as possible, any way.

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As soon as the old colony needs sections, we will give them in the same manner. We will not discuss any particular hive or crate, but will be expected to use those that some of our most exten-

sive and successful honey-producers use, as they are sure to use the best.

(Continued next week.)

Queenless Colony in Winter.

MRS. ATCHLEY:—I have a queenless colony, I am sure, because I found their queen dead at the entrance. We have had zero weather here since long before Christmas, and it is very cold yet, and it would be a loss to send a queen at this season. Do you think these bees will rear a queen in cold weather? If they do, it will be hard to introduce one in March or April, or when they can fly, will it not? I know they have brood now. What is the best way to manage such colonies? A reply through the AMERICAN BEE JOURNAL will do.

L. D. Bishop Hill, Ills., Jan. 30, 1893.

FRIEND L. D. :- Your finding a dead queen in front of the hive is not conclusive evidence that the hive is queenless. There are hives that have two queens pretty often-one very old, and a young queen-and they sometimes go into winter with two queens, and during cold weather the old one may die or be de-stroyed, and the young one lay right along as though nothing had happened. I rather think you have a case of this kind, as you say you are sure they have brood. Here in the South, we often have what we term "pauper swarms," that come out of their hives on warm days in winter, and enter other hives, and of course one of the queens is killed.

But in case your colony is queenless, and they have brood as you say, they will rear a queen just the same as at any other time of the year; but she may not have a chance to mate, and of course will be useless only to keep the colony pacified until you can give them a queen, or a frame of eggs and brood in the spring. Should they rear a queen, just let her alone in the hive until you get ready to introduce one in the spring, or give them brood, and at the time of giving a queen or brood, take out the worthless queen, and all will go well. In fact, one of the best ways to introduce a queen, is to remove the old and put in the new queen at one and the same operation.

Have You Read that wonderful book Premium offer on page 197?



Value of a Good Colony in Fall and in Spring.

Query 859.—What is a good average colony of bees worth in November, and also in the spring? I allude to bees in box-hives only, as those who have frame hives seldom want to sell their bees.—Tennessee.

I do not know .- M. MAHIN.

About \$1.00.-WILL M. BARNUM.

From one to two dollars.-J. P. H. Brown.

That depends upon your pocket-book and longing to buy.—DADANT & SON.

I have bought them for one to two dollars, in the spring.—JAS. A. STONE.

Locality, demand, and circumstances will govern in such cases.—H. D. Cuttine.

Nothing in the fall, and \$2.00 in the spring; that is, in my locality.—J. E. Pond.

In November, \$2.50, and \$3.50 in the spring, for Italians.—Mrs. L. Har-RISON.

Here, in box-hives, in November, \$2.00 to \$3.00; May, \$3.00 to \$4.00.

—J. H. LARRABEE.

It is impossible to name a uniform price, as their value depends upon the location.—P. H. Elwood.

In this locality, \$1.00 to \$1.50 in November, and \$1.50 to \$3.00 the first of April.—J. M. Hambaugh.

Two dollars in the fall, \$3.00 in the spring, would be a fair price for bees in such hives.—G. M. DOOLITTLE.

I should say \$3.00 to \$4.00 in the fall, and \$5.00 to \$6.00 in the spring, according to strength.—G. L. TINKER.

Circumstances vary so much that there is no rule. What's the going price in your neighborhood?—C. C. MILLER. In fall, \$3.00; in spring, \$5.00, if they are strong and vigorous in both cases. Of course, prices vary with the locality.—A. J. Cook.

The market price. If there is no market price established, then all you can get for them from an ordinarily shrewd man.—R. L. TAYLOR.

I should be a poor judge of what they should be worth in your locality. Here I would say 50 per cent. less in fall than in spring.—EUGENE SECOR.

That depends upon supply and demand. Bees in box-hives are worth less the price of the frame hive and cost of work to transfer them into frames.—E. France.

It must necessarily depend upon the supply and demand, as there is no "corner" on bees. I used to buy bees in box-hives for \$2.50 to \$3.00 per colony.

—G. W. Demaree.

I should say \$3.00 in the fall, and \$4.00 in the spring. This may seem a high price to some, but in comparison with other live stock I consider it very low.—C. H. DIBBERN.

It would be hard to set a price unless acquainted with the surroundings; so much depends upon pasturage, price of honey, etc. Here, good colonies in the spring, in box-hives, would be worth \$2.50 to \$3.00.—S. I. FREEBORN.

I don't know what bees would bring in Tennessee, but in most places the price in box-hives would range from \$2.00 to \$5.00 in the fall, and from \$5.00 to \$8.00 in the spring, depending upon location, supply and demand.—

MRS. J. N. HEATER.

You ought to know what bees are worth to you better than I can tell you. Add \$1.00 to the value of the frame hive, and the sum will be the difference in value of 2 colonies of the same kind of bees, of the same strength, one in frame, the other in box-hive, provided the frame hive has straight, all-worker combs.—James A. Green.

As supply and demand usually rule the price of nearly every thing, I should think \$2.50 about the price of a good colony of black bees in a box-hive in November, and \$3.00 in the spring, before swarming time. They are sold here for all sorts of prices. Willie (my son), a few days ago, bought 13 colonies, in boxes, for \$13, and has taken out \$25 worth of nice chunk honey, and transferred them, and still left them plenty to winter on.—Mrs. Jennie Atchley.



Report of the Illinois State Bee. Keepers' Convention.

Written for the American Bee Journal BY JAS. A. STONE.

The 4th semi-annual meeting of the Illinois State Bee-Keepers' Association met in the Senate Judiciary Room of the Senate House at Springfield, Ills., on Dec. 14, 1892, at 10 a.m., for a two days' session, with President J. M. Hambaugh in the chair. The meeting was opened with prayer by Rev. T. D. Logan, of the 1st Presbyterian Church of Springfield.

The minutes of the last meeting were

read and approved.

The following members paid their annual fees for 1893:

J. M. Hambaugh, Spring.
C. P. Dadant, Hamilton.
Chas. Dadant, Hamilton.
A. N. Draper, Upper Alton.
S. N. Black, Clayton.
Geo. E. Robbins, Mechanicsburg.
P. J. England, Fancy Prairie.
Jas. A. Stone, Bradfordton.
D. D. Cooper, Sherman.
W. J. Finch, Jr., Springfield.
Geo. Poindexter, Kenney.
Chas. Becker, Pleasant Plains.

Chas. Becker, Pleasant Pla A. Phelps, Springfield. Elias Robinson, Carmi.

C. V. Mann, Riverton.

Jas. Poindexter, Bloomington.

A. W. Spracklen, Cowden.

J. Q. Smith, President Central Illinois Bee-Keepers' Association, Lincoln. Jas. Forncrook, Watertown, Wis.

The following sent in their fees by mail just before or after the meeting:

Peter Blunier, Roanoke. M. Bevier, Bradford. E. T. Flanagan, Belleville. Aaron Coppin, Wenona.

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Advancing Bee-Interests—Caring for Honey.

Remarks on "How to Advance the Interests of Bee-Culture," and "How to

Care for Honey," brought out some good thoughts.

Mr. Robbins said that honey, whether comb or extracted, if properly cared for, would grow better by age. He waited for his honey to be sealed before ex-

tracting.

Mr. Becker never waited for his bees to seal or cap the cells before he began to extract, and he never had any to spoil. He did not approve of too small a package for extracted honey; while Mr. Robbins thought we ought to have very small packages for it.

Mr. Dadant said the sealing of honey had nothing to do with the ripening of it, and that the package ought to be larger when honey was cheap, and smaller when it was high. He said the time was coming when honey would be as common as butter.

Mr. Finch said that when a trade in honey is established, it can be sold in small packages.

Mr. Dadant said that it only takes five . or six days to ripen honey.

Mr. Hambaugh said the consumer will buy it in whatever shape it is put up. He compels his buyers to furnish the cans to put the honey into. He thought the amount of the blooms had nothing to do with the flow of honey. It was the conditions of the weather which caused the blooms to furnish honey, or not to furnish it.

Mr. Black thought there ought to be a large package for wholesale, and a small one for retail trade.

On motion, a committee of three was appointed to confer with the other associations in session in the State House, in regard to a union meeting at night. The committee were Chas. Dadant, Jas. Poindexter, and S. N. Black.

Adjourned until 1:30 p.m.

AFTERNOON SESSION.

At 1:30 p.m. the meeting was called to order with President Hambaugh in the chair. The President's address, which will be published in full in our next Report, was highly applauded.

On motion of Mr. Becker, a committee of five was appointed for a legislative committee to recommended legislative measures, and report the following morning. The committee were, C. P. Dadant, Jas. A. Stone, Chas. Becker, Geo. S. Robbins and Geo. Poindexter.

The Secretary's report was then read, received and placed on file.

On motion, the further distribution of

the Reports of 1892 was left to the discretion of the Secretary.

The committee on programme for the evening, made a report, which was accepted, that the other associations had all adjourned until the next day, and that they had left an invitation with the chief janitor, that any further attendants upon any of the associations, be invited to attend our meeting.

Empty Combs and Extracted Honey Packages.

An essay was then read by P. J. England, on "Empty Combs and Packages for Extracted Honey," which will be published in full in the Report.

In the discussions which followed Mr. England's essay, there was quite a difference of opinion in regard to drumming the bees out of the old hives, some claiming they could not do it, while others spoke of it as a matter of no difficulty.

Mr. Robbins never would drum bees out of old comb until about swarming time.

Mr. Becker would drum bees out, taking care to save all the brood.

Mr. Dadant would take great care in saving all the brood, when drumming out of old hives.

Mr. Hambaugh would always transfer about the time of fruit bloom, smoking the bees a little before he started to drum them out. He used string to tie old combs in the frames, and the bees would pick them to pieces and carry them out, by the time the combs were fastened.

Mr. Dadant said strings bothered the bees too much; and that the bees sometimes got tangled in them. He used wire, bent L shaped at the ends, and drove them into the frames.

Standards for Judging Italian Bees.

The question-box was taken up next, and the following question asked:

"Should there be two standards for judging Italian bees at fairs? If so, what should those standards be?"

Mr. Hambaugh did not see how we could have two standards for a single race of bees.

Mr. Dadant said the standard should be three yellow bands, whether they be bright yellow or leather-colored.

Mr. Smith said his experience had been that light-colored combs made light-colored bees.

Geo. Poindexter said he believed in rearing the Italians that produce the most honey, regardless of color.

Mr. Dadant thought we could not de-

cide which color was the best, as we did not know.

On motion a committee of three was appointed to investigate as to the steps to be taken for the affiliation of other bee-keepers' associations of the State with the State association. The committee were S. N. Black, J. M. Hambaugh and J. Q. Smith.

On motion, the convention adjourned to meet at 7 o'clock, for an evening session

EVENING SESSION.

The convention met at 7 o'clock, and the order was unfinished business.

The treasurer's Report was read, and showed a balance on hand of \$31.10 of the association fund, and \$60.85 of the State appropriation.

Report on Affiliating Associations.

The committee on affiliation reported as follows:

We, your committee, appointed to examine Constitution with a view of adopting an article admitting bee-keepers' associations to affiliate with the Illinois State Bee-Keepers' Association, beg leave to submit to you the following report:

In view of the fact that we have no application for affiliation from other societies, that we deem it the part of wisdom to discourage the plan of affiliation, and recommend that the bee-keepers of the State join personally, thus placing every bee-keeper in the State on an equal footing with us. Mr. Smith assures us that their society prefers this plan, and will join us personally.

S. N. BLACK, J. M. HAMBAUGH, J. Q. SMITH,

The report was discussed, and finally laid on the table.

The convention then adjourned to meet at 9 o'clock the following morning.

SECOND DAY-Morning Session.

On Thursday morning, at 9 o'clock, the meeting was called to order by President J. M. Hambaugh.

An essay by Dr. C. C. Miller was read by the Secretary, on the subject, "Do Bee-Keepers Need an Experimental Station?" The essay was discussed, but no further action was taken than that taken at the Chicago meeting in October. [Dr. Miller's essay will soon appear in the Bee Journal.—Ed.]

The Committee on Code of Rules and Standards for Grading Apiarian Exhibits at Fairs, made their report, but the final action on the same was deferred until the meeting at Springfield, next year.

A resolution of Greeting was voted unanimously as follows:

ILLINOIS STATE B.-K. ASSOCIATION, SPRINGFIELD, Ills., Dec. 15, 1892.

Resolved, That we extend our congratulations to our friends and brother farmers of the State Grange, now in session in this building, wishing them and their organization success and prosperity; and that a copy of this resolution be sent to them at once.

Resolutions were offered by Mr. Dadant, and adopted, as follows:

Resolved, That we extend our hearty thanks to our President, Hon. J. M. Hambaugh, for his successful efforts in securing the annual appropriation from the Legislature for our industry; and also for his successful attempt at securing recognition from the Illinois Commission at the World's Columbian Fair and Exposition; and,

Resolved, That we also extend to our worthy Secretary, Jas. A. Stone, our thanks for his efficient and valuable Report for the year 1891, and for all his work in behalf of the association; and that we instruct the Treasurer to pay into his hands the sum of \$25 out of the membership funds of the association, regretting that the sum may not be

larger at present.

On motion by A. N. Draper, it was voted that the \$20 paid W. Z. Hutchinson for reporting the Chicago meeting, be taken from the State appropriation; this was amended by taking it from the appropriation for next year.

A discussion followed on the "Code of Rules and Standards for Judging Apiarian Exhibits at Fairs," and on motion of Mr. Draper, the report of the committee on the same be ordered printed in our next Report, and not acted upon

until next year.

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In the discussion on Dr. Miller's essay, Mr. Draper thought we needed no Experimental Station. Mr. Dadant said it was very evident that we had never received any benefit from an Experimental Station, and that we never would unless it be in the hands of a good bee-keeper.

Greetings from the Illinois State Grange, in session at the State House, Springfield, Dec. 15, 1892.

JAS. A. STONE, SEC. ILLS. STATE B.-K. ASSOCIATION.

Dear Sir: -The friendly message of your Association to the State Grange

has been received and presented, and I am directed to respond, thanking you and your associates for the courtesy extended. We are all co-workers on the farm, and in the various interests of agricultural affairs, and it is meet that we give each other the right hand of fellowship and good-will in the common cause.

Trusting that your meeting is pleasant and profitable, and will be crowned with success, I am very truly and fraternally yours,

THOMAS KEADY, Sec.

The above message was read, received, and ordered printed in our Report.

The committee on Legislative measures reported, and on motion their report was read and adopted by sections as follows:

Your committee recommend that it is advisable to secure the following Bills

from the Legislature:

1. A Bill to prevent the spraying of fruit-bearing trees, shrubs, vines or plants with poisonous compounds during bloom.

2. A Bill to compel adulerators to label all mixtures of extracted honey with the true name of their components, whether sugar, glucose, or other sweets not gathered from the flowers.

We believe that all mixtures that are not entirely pure extracted honey as gathered from their natural source by the bees, should be so marked, and labeled with the name of the manufacturer.

3. A Bill to continue the appropriation to the State Bee-Keepers' Association for the publishing of its Report.

4. We also recommend the election of a committee to be composed of Messrs. J. M. Hambaugh, S. N. Black, and J. A. Stone, as a standing Legislative committee to pursue the aim of securing the above-mentioned legislation.

C. P. DADANT, J. A. STONE, CHAS. BECKER, G.E. ROBBINS, GEO. POINDEXTER,

The convention then adjourned until 1:30 p.m.

AFTERNOON SESSION.

The convention met at 1:30 p.m., with President Hambaugh in the chair.

An essay was read by Mr. C. P. Dadant, on, "Why Farmers and Horticulturists Should be Bee-Keepers." This will be published in the Report. [It will also appear in the BEE JOURNAL soon.—ED.]

ED.]
Mr. A. N. Draper read an essay on
"The Adulteration of Honey," which,
on motion, was ordered sent to Mr.

Ernest Root, to be read at the meeting of the North American at Washington; and that our meeting earnestly protest against the sale of sugar syrup fed to bees and sold under the name of "honey."

The election of officers for 1893 resulted as follows:

President-Hon. J. M. Hambaugh, of Spring.

Vice-Presidents—1st, J. Q. Smith, of Lincoln; 2nd, Mrs. L. Harrison, Peoria; 3rd, Peter Miller, of Belleville; 4th, Geo. Poindexter, of Kenney; and 5th, C. P. Dadant, of Hamilton.

Secretary-James A. Stone, of Bradfordton.

Treasurer—A. N. Draper, of Upper Alton.

On motion, the Executive Committee was instructed to place the next State appropriation in the hands of the Treasurer.

The convention then adjourned sine die.

JAS. A. STONE, Sec.

CONVENTION DIRECTORY.

Time and place of meeting.

Feb. 25.—Wabash Valley, at Vincennes, Ind. Frank Vawler, Sec., Vincennes, Ind.

April 5, 6.—Texas State, at Greenville, Tex. A. H. Jones, Sec., Golden, Tex.

May 4.—Allegany Co., at Belmont, N. Y. H. C. Farnum, Pres., Transit Bridge, N. Y.

Secretaries are requested to forward full particulars of the time and the place of each future meeting.—The Editor.

North American Bee-Keepers' Association

PRESIDENT—Dr. C. C. Miller.... Marengo, Ills. VICE-PRES.—J. E. Crane...... Middlebury, Vt. SECRETARY—Frank Benton, Washington, D. C. TREASURER—George W. York... Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor. Lapeer, Mich GEN'L MANAGER—T. G. Newman, Chicago, Ill.

Your Neighbor Bee-Keeper—have you asked him or her to subscribe for the Bee Journal? Only \$1.00 will pay for it for a whole year. And, besides, you can have Newman's book on "Bees and Honey" as a premium, for sending us two new subscribers. Don't neglect your neighbor! See page 101.



Further Details of Packing Bees for Winter.

Written for the American Bee Journal BY JAS. A. GREEN.

Several bee-keepers have written me asking me to detail more fully the method of wintering bees given on page 22. In this article, and a succeeding one, I will endeavor to cover the points inquired about, and to render the whole subject as plain as possible for the beginner.

There are localities, no doubt, where it is better to winter bees in a cellar. This does not depend altogether upon the matter of latitude, as we find from reading the reports from various localities that there are some places very far north where bees are wintered out-ofdoors with success year after year, while in other places much farther south, beekeepers have come to regard cellar-wintering as the only safe method. Neither is this difference in results due entirely to the variations of climate from local causes. A part of it is to be ascribed to the differences in methods of preparing the bees for winter, and another part to the differences in cellars.

For some unexplained reason, or reasons, cellars vary greatly in their suitability for wintering bees. This is a matter that will perhaps bear considerable investigation. At present all we know in regard to it is that two cellars. in the same locality, apparently exactly alike in all the requisites for a good beecellar, will show year after year a wide difference in results. For these and other reasons, no one can be sure that it will pay him better to winter bees in the cellar, until he has himself made it a matter of experiment. If he makes a change in cellars, he may have to experiment anew.

Without going deeply into the subject of out-door vs. cellar wintering of bees, I will simply state that it is my belief that wherever out-door wintering can be made successful, it is the preferable method. Furthermore, I believe that there are but few localities where bees may not be wintered successfully out-ofdoors by using proper methods.

After experimenting with several different cellars for a number of years, some of which wintered the bees as well as I should ever expect any cellar to do, I have come to the conclusion that, for me at least, it is much more profitable to winter bees out-of-doors. In forming this opinion, I have taken into consideration all the factors that may arise during the whole year, that bear on the problem. Too many limit their consideration of the subject to the time the bees are in the cellar.

The essential requisites for successful wintering, beyond a sufficient number of bees and a sufficient quantity of food of good quality, are that they should be as well protected from the cold as possible, and at the same time leave them ready to fly whenever the weather will permit. It is common to attempt to fill these conditions by removing a part of the frames on each side of the hive, and fill in the space left with chaff-packed "dummies," filling the upper story with chaff cushions or other packing material.

This inside packing is good as far as it goes, but in the ordinary singlewalled hive it does not go very far, and is a very incomplete protection. Good two-story chaff-hives give much better results-almost as good, in fact, as those obtained by outside packing. But such hives are very much more expensive to make, and so much more inconvenient to handle, that the practical bee-keeper in these days cannot afford to burden himself with them. A defect in such methods of protection is, that the packing material cannot be made to form an unbroken protecting envelope around sides and top, as is the case when hives are properly packed on the outside.

As I go about the country, I frequently see bee-hives that the owner has tried to protect by piling corn-fodder, straw or litter about and over them, leaving the fronts exposed. While this may be of considerable value in keeping the wind from striking the hives, it does not afford as complete a protection from cold as is desirable. The covering becomes wet, and is apt to prove a veritable "wet blanket" to the prosperity of the colony. Besides, this continual dampness is very hard on the hives. Quite an important item in favor of complete protection is that the hives, being completely protected from the weather, will last much longer, and especially will not need painting nearly as often. The outer cases, being made of cheaper material, will probably add enough to the durability of the hive to pay for their cost.

An error that many beginners fall into is to attempt a method of wintering that I will describe by quoting from the letter of inquiry lately received.

as follows:

"I have this winter taken my hives into an open chamber over a summer kitchen, which is very cold, of course. I set the hives close together, all facing one way, and put around the sides and back a good supply of newspapers, then covered over with thick quilts, and also around the sides, back and front, but not tight enough in front but what plenty of air can get to them. Now, do you think they will winter this way? or should I remove this and fix as you have stated in the BEE JOURNAL?"

This man was evidently anxious to prepare his bees for winter in the best possible manner, as is shown by the pains he took with them; yet it is probable that his bees would have wintered better if he had left them out-of-doors without any attention whatever. method has all the defects of cellar wintering-some of them in an aggravated form-without any of its advantages. Such a place as is described is but little warmer than out-of-doors, in the coldest weather, and it does not warm up as quickly when warm days come.

There are often days in the winter when the sun shines bright and warm for several hours, and the bees outside have a good, cleansing flight that puts them into good condition to stand another siege of cold weather. But the enclosed building does not warm up readily in the brief sunshine. The bees confined to their hives for month after month in a low temperature, become restless and uneasy from the overloading of their intestines with fecal matter, and perish with diarrhea, or come out in the spring in such a weakened condition that they soon succumb.

If the building does become warmed up enough for bees to fly, and results are as bad or worse, as the bees, leaving the hive, fly to the windows, where they perish. If there are no windows, they fly out at the cracks, and in returning

fail to find the hive.

I advised this inquirer to leave his bees where they were until a day came warm enough for bees to fly outside, then take them out and protect them there. They should be put on the stands they occupied in the fall, unless there is snow on the ground, when this will not be necessary.

It is generally conceded that a cellar or building in which bees are kept, should be kept as dark as possible to secure the best results. This is especially true if the temperature ever becomes high enough to tempt the bees to

fly from their hives.

Some bee-keepers are successful in wintering their bees in buildings above ground, though their numbers are few. These wintering repositories are made with thick, frost-proof walls, and a number of colonies are wintered in the same place. It should be remembered that a hundred colonies may winter perfectly in a place where half a dozen would all die.

As stated in my article on 'page 22, I now prefer to pack 4 colonies in one box. In doing this, I do not want to move the bees far from the positions they occupied in the summer. A common mistake on the part of novices is to move their bees into new positions on the approach of cold weather, for the purpose of protecting them more conveniently, usually setting them'in a long row. If a warm day comes soon after, or in fact, at any time, unless the appearance of the surroundings have been greatly changed by a fall of snow or otherwise, the bees return in great numbers to their former location, and thousands of them are often thus lost.

When a number of hives are set closely together in a row, trouble is often experienced if it becomes necessary to examine a part of them, as it is hard to do anything with one colony without disturbing all, to a greater or less extent. Besides this, when the bees fly out, they are apt to become mixed, and, in returning, enter the wrong hives, sometimes a few hives getting nearly all of them. This is especially the case when their first flight is on a day that grows suddenly warm after a long confinement. In the spring, this is very ruinous, and there is often great loss from this source.

To obviate loss from this mixing of bees, never place more than three hives in a row at any season, For conven-ience in handling, it is better not to have more than two.

The hives that I pack together are set in groups of four, two facing east and two west, which position they occupy all summer.

It is not necessary or desirable that they should be as close together in the summer as they are wanted for winter.

A hive of bees may be moved two or three feet forward or sidewise, or twice that distance back without detriment, provided its general position toward its surroundings is not thereby changed. If it becomes necessary to move them greater distances than this, or to change their relative positions, it should be done gradually, moving the hive a foot or two each day that the bees fly freely.

Ottawa, Ills.

(Concluded next week.)

Workers Laying with Unsealed Brood-Will of the Queen.

Written for the American Bee Journal BY DR. C. C. MILLER.

Not often does one meet with so jolly a foe as Mrs. Atchiey. We ought always to be glad to have the truth prevail, no matter which side whips, but it is much easier to do so when our opponent fights fair and good-naturedly.

I think Mrs. Atchley has given satisfactory proof as to workers laying with unsealed brood in the hive, as many such cases have come under her own observation. And although shé does not say so. I suppose she has also seen with her own eyes, cases of laying workers while young queens were present.

Her experiment with the eggs laid by the queen in her hand is very interesting, but I must say it doesn't prove beyond the possibility of a doubt that the will of the queen has anything to do with the sex of the egg. Indeed, interesting as are her experiments, they hardly can be said to prove anything new, for queens often lay eggs, in rudimentary cells, much the same as if laying eggs on the hand. The possibility is that a queen, when laying eggs in dronecells, is in some way in a different posi-tion from that in which she lays worker eggs.

Please understand that I don't pretend to know. Indeed, I have some doubts if any of us will ever know positively about it. And practically, I'm not sure that it is a matter of any great impor-tance. As it seems to me, there are difficulties in the case, whichever view we

I can think of one argument that would be more convincing than any-thing yet brought forward in favor of the "will" theory. It would be to find the queen laying in drone-cells that were merely begun. Because in that case she would be in about the same

position as in rudimentary worker-cells. Does a queen ever do this, or does she always wait until drone-cells have a fair

depth before laying in them? We know that workers are reared sometimes in drone-cells, and that in such cases the queen must have laid worker eggs in them. But in such cases are not the mouths of the drone-cells made the size of worker-cells by the addition of wax? I think they have always been in the cases I have seen. Now if workers can be reared all right in dronecells (and we know they can); and if the queen can lay either kind of eggs at will, why is it that at a time of year when workers only are reared, the queen will leave vacant the drone-cells that are in the middle of the brood-nest instead of filling them with worker-eggs?

I once gave to a colony a hive filled with drone-comb. Surely, if the "will" theory is correct, the queen, in that case, ought to have laid worker-eggs in drone-cells. Did she? No; with no brood in the hive she wouldn't lay droneeggs, and it seemed she couldn't lay worker - eggs, so she deliberate "struck," and the bees swarmed out. she deliberately suppose they thought it would be too big an undertaking, and take too much wax, to narrow the mouths of all the

cells.

At times when the queen seems so anxious to lay in drone-cells that she will go two or three combs out of the brood-nest to find drone-cells, why doesn't she lay drone-eggs in workercells in the middle of the brood-nest, if she can? To that it may be answered that she will not do so because there is not room for a full-sized drone in a worker-cell; but that is hardly a satisfactory answer, in view of the fact that in other cases the bees don't use that kind of reasoning, as when they try to rear a queen from a drone larva. They are anxious for a queen, and they try their best to rear one with the material on hand, although it must be a total failure, why should they not try to rear drones in worker-cells when so anxious for them, and no drone-cells in the hive? Or is it because the workers are more stupid than the queen when a thing is left to their intelligence?

Just a word about "compression:" Possibly it isn't best to use that word, but if the will of the queen does not control the matter, and there is nothing better than to suppose that there is mechanical compression when workereggs are laid, it does not follow that such compression does not exist even when the queen lays eggs on the hand. For it is possible that in that case there is sufficient curving of the body to make the same compression as when the queen is laying in a worker-cell.

On the whole, I don't know for certain

which theory is true, and I doubt if either of us will ever know. So if Mrs. Atchley thinks she knows, she can consider herself ahead more than half the time, and we'll look for something else to quarrel about.

Marengo, Ills.



23 Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Unable to Supply the Demand.

I have 26 colonies of bees, most of which are in movable-frame hives. My frames are 11x17 inches, with the topbar in two pieces, which makes it very easy to fasten the foundation. The super holds 27 one-pound sections. Last year was very poor here, my best colonies storing only 54 pounds, and others none. I got 20 cents per pound for all my honey, and cannot nearly supply the demand. Joel Co Linden, Ind., Jan. 25, 1898. JOEL CONRAD.

The Seasons of 1891 and 1892.

The year 1891 was a poor one for I had 53 colonies which yielded only 700 pounds of comb honey, but the bees were in good condition for winter. I winter my bees in the cellar, and on April 24, 1892, I put out 51 colonies, which seemed to be strong and hearty, but on account of much rain and cold weather, I had to feed them and double them down to 42 colonies, and many were then so weak I had to feed them through May and two-thirds of June. On July 16th they began to move up into the surplus boxes. On Aug. 10th I had some swarms, having 130 pounds of surplus honey in one and two pound boxes, and in all I had 2,500 pounds of honey, and the colonies had increased to 51, which had plenty to live on until next spring. I have sold all my honey at $12\frac{1}{2}$ cents per pound.

There are many here that have lost all their bees—some lost one-half, and others two-thirds of what bees they had, while I only lost 2 out of 53 colonies, and 9 swarms I doubled, so I believe the cellar is the best place to winter bees.

As my bees are black and hybrid, I expect to get a good queen-bee of the best 5-banded Italian, if possible to improve my bees, though I believe the black bee winters the best. I think that hybrid queens breed the fastest in the spring. The hybrid bees are generally the ugliest, but I have no trouble in handling them. I use neither veil nor gloves, and I go right in amongst them with my sleeves rolled up, and no protection of any kind.

J. E. THORSTAD. Blair, Wis., Jan. 26, 1893.

Visionary Bee-Keeping, Etc.

I saw the advertisement of Mrs. Lizzie E. Cotton in the Topeka Capital, also in the Lawrence Journal, wherein she stated that one person from her new system of bee-keeping started with one colony, and the third year sold \$800 worth of honey, and increased to 26 colonies! Can it be that she is as big a humbug as she used to be a few years ago?

Bee-keeping has been a poor business in Kansas for the past two years. There was no surplus honey. I have 49 colonies wintering on the summer stands, and all seem to be in good condition. Some are in double-wailed hives, and the rest in single-walled hives. I never could see any difference in their wintering.

A. L. WILLIAMS.

Lawrence, Kans., Jan. 27, 1893.

Virgin Queens—Comb-Baskets.

I notice in Gleanings, page 53, that some reviewing has been done, and some valuable knowledge given in the matter of virgin queens being fertilized beyond 21 days old. My rule has been to kill them after 21 days, if no appearance of laying or fertilization was noticed. Now I think I will wait 31 days.

I have read Query 854 in the Bee Journal about sloping comb-baskets in extractors, and would say that the slope is far the best for all combs that hang in a basket the same as in a hive; for two reasons, viz.: 1st, the brood will

receive less centrifugal force, it being near the center shaft, and if no brood, the bottom honey will be the last stored, and thinnest, and go out easily. 2nd, honey-cells are sloping upwards when the combs are plumb, but when sloping the comb brings the cells level, otherwise the honey would have to be raised up before going out of the comb. But for Langstroth combs, or any that stand in the basket on an end, I want them to stand plumb, because the honey is as ripe at the bottom as at the top, and needs as much force to throw it out.

One more "kink" I will tell about: There is a right and wrong way to put Langstroth combs into the extractor, on account of cells of comb sloping upward. Always make the bottom-bar of the frame go ahead when turning, then the cells will be sloping backward a little, and the honey flows out easily. For illustration, see how a scoop shovel can be loaded or unloaded by this sloping either forward or backward. I have my bees in the cellar this cold winter.

JAS. R. BELLAMY. Black Bank, Ont., Jan. 23, 1893.

What the Black Bees Did.

I have a colony of black bees which cast a prime swarm on May 30, 1892, and one on June 10, which were both hived separately. The first swarm swarmed again on July 20, and the second swarm gathered 50 pounds of comb honey, besides 55 pounds for winter stores. I call that pretty good for last season, as we had so much rain here that bees could work only half the time.

Chippewa Falls, Wis., Jan. 30, 1893.

Beginner's Experience and Troubles.

I desire to report my success in honeyproduction, and also my troubles, and see if any one can help me with advice.

On July 8th I procured a colony of black bees; in three weeks they filled 28 one-pound sections, and later filled the hive full to overflowing with honey of No. 1 quality.

On Aug. 16th they cast a fine swarm, which stored about 40 pounds of honey before frost came. The hive was a home-made affair, hastily constructed; the tops of the frames were not beveled, and no starters were used. The bees built their combs crosswise of the frames, so they cannot be removed. They were a strong, vigorous colony,

and I intended to run them for increase next season.

In October the parent colony (with its rich stores of white honey) was stolen—we never discovered the loss until after dark the next night. The young colony was hurried into the cellar, right then—without any examination. They had plenty of fresh air, and seemed all right by their hum, whenever I tapped on the hive, so I did not disturb them by opening their hive until Christmas, when I peeped in and saw a few webs and empty moth-shells.

To-day they are numerous, and honey is running out of the hives, while the bottom-board is covered with powdered comb. The bees are still alive, with plenty of good honey. Now, my query is, Can anything be done to save them?

The frames were 16x10 inches, 13 in number, and the bees or honey occupy 9 of them. Perhaps there is too much vacancy.

MRS. A. M. SHANK.
Sioux City, Iowa, Jan. 30, 1893.

[The case may not be so desperate as it looks. As there is plenty of honey, if there are plenty of bees they may come through all right. But if there are so many worms that they have torn down the combs enough to set the honey runing, it is probable that there are so few bees that they will hardly pull through. Are you sure it is honey and not water that is running out of the hives?

In either case, you can hardly do any better than to wait patiently until you can set them out for a flight, after it seems fairly settled for warmer weather.

If they live through, and the combs are too crooked to be removed, you can treat it as a box-hive, and transfer three weeks after swarming.—ED.]

Cold Weather—Extracted Honey.

As I write the thermometer indicates very severe cold weather, from 10° to 30° below zero. Bees that are left out-of-doors unprotected will perish if this weather continues long. Those that are well packed in chaff or other dry absorbing material, will stand a far better chance; still, if this severe weather continues very long, many of these will probably succumb. Those that are in warm positions, or cellars, I think are very much better off—at least for the present; but when April and May come,

many of the hives may be empty, or the bees so reduced in numbers that very little surplus honey can be obtained until July.

The past year has been quite an unfavorable one for the bee-keeper in my locality; not more than one-half of an average crop has been obtained. A large number of colonies died last winter and spring, still there seemed to be plenty left. Many of the novices have been discouraged. For several years bees have wintered well any where. The wild bees seemed to pull through all right, and swarms are very often to be seen by farmers in the summer.

There are very few bee-keepers who give much attention to the extracting of honey, nearly all seeming to be contented to obtain what they can in the comb; not seeming to understand how much more certain they are to obtain a good crop, or how much better the swarming can be controlled. But, alas! where is he to find a market for his extracted honey? Can he place it on the market and get his cash? Not much. The adulterator has been there, and the would-be consumer has been fooled and swindled so much, and so long, that he has no confidence in any "strained" honey. It seems to me that it is high time for bee-keepers to arise en masse, and cry loudly to Congress to pass such laws as will give us relief. I am glad the American Bee Journal is wide awake on this subject, and is pushing the work. Let every bee-keeper in the land bestir himself, and let us see if we can't stop this nefarious business, that is so ruinous to our business.

A. C. SANFORD. Ono, Wis., Jan. 14, 1893.

The Changeable Weather of 1892.

Last season was about the most destructive we have had in the history of the State, on bee-culture, especially southeastern Kansas. February opened warm and nice; the soft maple and elm blossomed, then came a freeze about the first of March, killing the bloom. bees having commenced rearing brood, they dragged some of it out, as they could not cover it all. The weather continued bad all through the month. fruit-trees began to bloom in April, starting the bees to breeding again, then the weather became wet and cold, chilling a great deal of the brood, and continuing wet and cool until the last of May, and a great many bees starved to death, unless they were fed, and leaving them too weak for the honey-flow of June to give any surplus. They just got built up nicely when the drouth set in in July, so they consumed about all of their stores until the last of the month, when the fall honey-flow began to come. They gathered a little until the first of September, then the bees began to roll the honey in. My report is as follows:

From 16 colonies I took 300 pounds of comb honey, and 204 pounds of extracted honey, making an average of 31% pounds to the colony. My best colony gave me 104 pounds of honey—84 pounds of comb honey, and 20 pounds of extracted. My bees went into the winter with about 50 pounds per colony. The winter has been good so far for the wintering of bees.

L. WAYMAN. Chanute, Kans., Jan. 23, 1893.

An Old Bee-Keeper's Report.

I purchased 5 colonies one year ago, and increased them to 14, which I have in winter quarters. I secured a copy of the BEE JOURNAL from a friend, and found in it an article on bee-catchers that was worth to me more than the price of the BEE JOURNAL. I am in my 85th year, and still in good health.

JOHN W. CRARY. St. Paul, Minn., Jan. 27, 1893.

Experience of a Beginner.

In the fall of 1891 I purchased one colony of bees, and before cold weather came on I fed them a large amount of sugar syrup, so they would be sure to get through the long winter; but they all died before spring. I immediately purchased another, that was alive, although a little short of honey, but it carried them through. These I looked on for some profit, but almost in vain. They swarmed once, but left for parts unknown, so I was still left with one colony, and I thought of course they would store a good supply of honey, but to my surprise only 3½ pounds. Not quite discouraged, I purchased 2 colonies more to make 3 to put away for the winter, which I did as best I could, and as yet they are all alive.

Some of the writers speak of their bees taking a flight on such a day that they could not speak of here in Vermont, for we have about four months of the year that a bee could not leave the hive ten seconds before she would be frozen stiff. The mercury often drops to 350

or 40° below zero; the average temper-ture for the last 40 days and nights has been 40 below zero. Now, saying nothing about the weather, I well know that I am on the wrong track in bee-culture, and would like to be helped on the right one, by all who wish to assist one that always wants to succeed in his underkings. E. H. HALLETT. St. Johnsbury Center, Vt., Jan. 23. takings.

Temperature in December.

I send the report of the December, 1892, temperature here at Ionia, Mich., Greenville, Tex., and at Hamilton, Ills., which is as follows:

	Taken ne	ar sunrise at end	h place.
Dec.	Mich.	Tex.	Ills.
2. 1	1° above.	45° above.	30° above. 40° Bees fly.
3. 1	1° Bees fly.	48°	21° 27°
5. 2		38°	410
6. 4	0° Rain.	31°	46°
7. 2	2° Snow.	30° Frost.	48° 21° Snow.
9. 3	0.	33° Rain.	25°
10. 2	6° 9° Snow.	35° Rain.	14° 15°
12. 3	2° Show.	35° Rain.	250
13, 3	0.	36°	32°
14. 3 15. 2	40	33° Frost.	31° Rain. 22° Rain.
16. 3	00	36° Rain,	21° Rain.
	4° Snow.	37°	21° 21°
19. 2	2° Snow.	36° Rain.	19° Rain. — Rain.
21. 22.	6° 5°	34° Rain. 37°	13*
23. 1	0° Snow. 1° Below 0.	400	22° 27°
25.	6°	45°	13°
26. 27. 1	8° Snow.	28° Freezing 30°	8° 5°
28. 1	6° Snow.	32°	2.
29. 30. 1		32° 38° Rain.	20°
31. 3		36°	28*

During the month the 3rd and 6th were clear, the remaining part cloudy mostly all day. Direction of the wind was—west 13 days; southeast, 3 days; south 3; northwest 6; west 4. In Green-Tex., 18 days it was north and northeast, and northwest.

JACOB MOORE. Ionia, Mich., Jan. 4, 1893.

This is the second temperature report we have published, and if they are of sufficient interest they will likely be continued. We should be pleased to know whether our readers care enough about it to ask that we keep up the publication of these monthly records of the weather.-ED.]

Wintering Well-Good Prospects.

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My bees are wintering well. This is about the time when our bees have the hardest time. They have been in the cave two months. If bees are in good condition this time of the winter, they will be in good condition in the spring. I examined five hives to-day, and they all had sealed brood. We have had a grand winter—about six inches of snow, and five weeks of cold weather. When we have a good cold winter and snow, we have a good grain crop later, and also a good honey year. Why not have good courage? May we all be blessed this year with a good crop of honey—and that means money.

G. W. NANCE. Peiro, Iowa, Jan. 23, 1893.

Cold Weather-Moving Bees, Etc.

I have 120 colonies—80 in chaff hives, and the balance in cellars. I have not made an effort to keep them warmer than 38° in the cellar, but leave on duck and cushions. When this cold spell is over, it will be about 40° to 45°.

I use the Tinker 7-inch depth 8-frame Langstroth hive, and add alternate combs with additional hives until the honey-flow; then I put the queen down in the lower story, and as the brood hatches, and the combs are filled I add more combs and hives, and at the close I have a queen in the top hive over an excluder, often laying before the harvest is over, and then I can divide, or destroy the old queen. I have stored them as high as 10 stories in a few cases, but mostly 6 or 8, and to go into my yard at night makes me think of the engine depot, with all steamed up ready to start.

I am only 50 feet from a church, and close to a horse-shed, and I do not have much trouble, but I have noticed that if I am out, and they get a little unsteady, when I return they seem to know it, and become quiet very soon after, if I go around among them.

Last summer I thought I would move one large colony, and let come what would. I moved them in the afternoon, while part of the bees were away, to the other side of the yard, about 30 feet, and in a few moments the old stand was enveloped in a dense cloud of bees. With quite a cluster on the old stand, I took this and moved slowly to the new stand, many following me; then I went back and talked and motioned to them to go with me to the new stand, and finally succeeded in getting them all

into their own hive. During the time I was at work I could see that part of the bees understood, and were acting as guides, and soon all were quiet. The next day they worked better than ever. The reason I moved them was, they were too much in my path. The last two seasons have been so mild that many have left bees out without protection this year, and are caught in this deadful cold spell, and we will see how they come out. My "knock down" chaff hives contain 2 colonies each, 2 inches of planer shavings on the sides, and a 6-inch chaff cushion on top of duck; 2 stories, with 2-inch rim under, and they seem to be doing well.

Martin H. Adams has 60 colonies that he left out in double-walled hives, and he is now sorry he did not put them in. It will be a test worth noticing; they are in large hives, heavy with honey. We have had it 23° below zero, and some less for a long time; occasionally a few degrees above, but no let up from cold weather for four weeks. Honey was poor with us last year, but we have

hopes for next summer.

E. H. STURTEVANT. Fort Ann, N. Y., Jan. 20, 1893.

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Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, February 18th, 1893:

CHICAGO, I.L..—There are occasional sales of best grades of comb honey, but the retailers are not yet sold out on supply laid in before the holidays. Prices are a little easier, especially on that which will not grade "fancy"—such brings 17@18c., and other grades 12@16c. Extracted, 6@9c., as to quality. Beeswax—22@25c. R. A. B. & Co.

CHICAGO, ILL.—Fancy stock is very scarce, with plenty of inquiry, with good prices offered for same. It sells readily at 18c; No. 1 comb. 16217c. Dark sells slow. White extracted fair supply, with good demand at 8½; dark, 6@70. Beeswax—23@25c. J. A. L.

CINCINNATI, OH10.—Demand from manufacturers is slow, but the demand is good for extracted for family use. It brings 668c.—No good comb is on our market. It would bring 14@16c.

Beeswax—Demand good, at 23@25c for good to choice yellow. Supply good. C. F. M. & S.

NEW YORK, N. Y.—Demand for comb honey is very light, White fancy stock is well cleaned up. The market is well stocked with off grades and buckwheat, and prices are irregular. Extracted is in good demand and stocks are light. We quote: Basswood and white clover, \$@8\%c.; buckwheat, 6@6\%c.; Southern, 70@75c. per gallon.

Beeswax—25@27c.

H. B. & S.

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SAN FRANCISCO, CALIF.—Choice extracted is scarce at 707%c., and demand heavier than supply. Choice comb is not scarce at 10012c., according to quality, 1-lbs. Beeswax is neglected at 22023c.

BOSTON, Mass.—Honey is selling slow and prics are lower. Best 1-lb. comb, 16@17c.—Extracted, 8@10c.
Beeswax—None on hand.
B. & R.

KANSAS CITY, Mo.—Demand good, supply very light. White 1-lbs., 16c. Extracted, 86 7c. No beeswax on the market. H. & B.

MINNEAPOLIS, MINN.—The market is good. We quote: Fancy white clover 1-lbs. sell fast at 18c.; 2-lbs. 16@17c. Buckwheat, comb, 13 @14c. Extracted, in barrels, 7@8c.; in 5 or 10 lb. kegs., 9@10c. J. A. S. & C.

KANSAS CITY, Mo.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white. 7@7½c.; amber, 5@6. Beeswax—20@23c. C.-M. C. C.

ALBANY, N. Y.—Our honey market is slow on account of cold weather, but our stock was never so light as now. We have less than 50 cases of honey on hand, and only one barrel of extracted; when usually we have 1,000 cases in stock. For honey not granulated in comb. we quote: White (small), 15@18c.; mixed 13@14c.; dark, 10@11c. Large comb and double glass sell for 1 to 2c. less per lb. Extracted, white, 8½@9c.; amber, 7½@8c.; buck-wheat, 7@7½c. H. R. W.

Great Premium on page 229!